Surname and name _____

Lesson 01. Natural numbers. AD

1. Our number system is positional. What does it mean? Write an example to show this property.

The value of a digit depends on the position that it has

$543 = 5 \cdot 100 + 4 \cdot 10 + 3$

2. Calculate the control digit for this bar code: 42 34652 70651 __

$4+3+6+2+0+\square = 20$

$2+4+\square+7+6+1 = 2\square \times 3 = 7\square$

$20 + 7\square = 9\square$

$9\square + \square = 100$

$\square$ is the control digit

3. Calculate the quotient and the remainder for the division: 803421 ÷ 738

8	0	3	4	2	1	738
0	6	5	4	2		1088
		6	3	8	1	
			4	7	7	

4. Do the following combined operation step by step: 2 · 20 – 2 · (14 – 12 : 2) + 3 · 5 =

$2 \cdot 20 - 2 \cdot (14 - 6) + 3 \cdot 5 =$

$2 \cdot 20 - 2 \cdot 8 + 3 \cdot 5 =$

$40 - 16 + 15 =$

$24 + 15 = 39$

5. Obtain the result of each step for the next chain.

Thirty	Divided by 5	times seven	plus three	share into 9 equal parts	times itself	add 7	a quarter of this	plus six	half of it
30	6	42	45	5	25	32	8	14	7

6. A trader bought 12000 kg of tomatoes for 2€ per kilo. The transport cost 800 euro. On the way he lost 2000 kg of tomatoes. What would have to be the price per kilo to get 5200 euro as profit?

Expenses:

$12000 \times 2 = 24000€$

$+800€$

$24800€$

Profit $+ \ 5200€$

$30000€$

Sales: 30000

$12000 - 2000\ kg = 10000\ kg$ | $30000 : 10000 = 3€/kg$

7. A tailor bought 750 jackets 8 € each. He got as profit 1500 €. How was the sale price per unit?

Expenses: $750 \times 8 = 6000$ €

Profit: 1500 €

Sales: 7500 €

$7500 : 750 = 10$ € unit

8. Calculate applying the distributive property:
a) $5 \cdot (2+4) =$; b) $7 \cdot (3+1) =$; c) $13 \cdot (10+5) =$

a) $5.(2+4) = 5.2 + 5.4 = 10 + 20 = 30$

b) $7.(3+1) = 7.3 + 7.1 = 21 + 7 = 28$

c) $13.(10+5) = 13.10 + 13.5 = 130 + 65 = 195$.